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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tetsuji Kito

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ALEXANDRIA, VA 22314

EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT

PAPER NUMBER

1611

NOTIFICATION DATE

DELIVERY MODE

10/04/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/534,524	<b>Applicant(s)</b> KITO ET AL.	
	<b>Examiner</b> Lakshmi S. Channavajjala	<b>Art Unit</b> 1611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 19 July 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-10 and 12-19 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-19-10 has been entered.

Claims 2 and 11 have been canceled. Claims 1, 3-10 and 12-19.

In light of the amendment, the following rejection of record has been withdrawn:

Claims 1, 3-10 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masashi et al. (AU-B-25757/95) in view of Otsuka (JP05070322, translation provided).

However, the following new rejection has been made:

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

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by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 3-10 and 12-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 7,732,050 ('050 patent) in view of Masashi et al. (AU-B-25757/95) and US 6,905,694 to Modi.
4. '050 patent claims are directed to a silicone-modified water-absorbing polymer comprising a cross-linked copolymer of hydrophilic vinyl monomer particle coated with a silicone compound, and selected from starch, carrageenan, gelatin agar, gum etc. '050 patent also claims a method of producing the said particle and a cosmetic composition

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comprising the water –absorbing polymer particle. The claims of '505 patent do not recite the claimed oil-in-water emulsion of the instant invention.

Masashi discloses water absorbent resin particles comprising water absorbent resin particles (A) which are a cross linked polymer of ethylenically unsaturated monomers comprising acrylic acid and/or acrylic acid salt as an essential element, treated with an organic polysiloxane (B), wherein (A) and (B) are mixed and/or reacted, the particles have a particle size of 10-1000um and the weight ratio of (A)/(B) is 100/(0.001-5) (abstract). Masashi further discloses since the surface of (A) particles is improved with (B) liquid organic polysiloxane, the water absorbent resin particles have an improved hygroscopic blocking rate in a high humidity and obtain a wettability to prevent the generation of dust. Additionally, since the conventional disadvantage of disturbing uniform penetration of water caused by bonding of water-absorbent particles each other is improved by the modification effect of (B) in this invention, the absorption rate is improved. Examples of such water-absorbent resins (A) include cross linked partially neutralized polyacrylic acid, self-cross linked partially neutralized polyacrylic acid, cross linked graft-copolymers of starch-acrylic acid salt, hydrolyzed cross linked graft- polymers of starch-acrylonitrile, cross linked copolymers of vinyl alcohol-acrylic acid salt, hydrolyzed cross linked copolymers of acrylic acid-acrylamide, hydrolyzed cross linked copolymers of acrylic acid salt-acrylonitrile, cross linked copolymers of acrylic acid salt and 2-acrylamide-2-methyl propane sulfonate, neutralized cross linked copolymers of isobutylene-maleic anhydride, and mixture of two or more of these examples (page 7, 2nd paragraph). In the case when the above cross linked polymers

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shown are examples of water absorbent resins (A) are formed with carboxylic salts such as acrylic salt as a raw material, or when they form salts as a neutralized product or a partially neutralized product, examples of such salts include sodium salt, potassium salt, ammonium salt, and amine salt (page 7, last paragraph through page 8, top paragraph). Preferable organic polysiloxane compounds include amino-modified silicone oil such as the amino-modified silicone oil (see page 11 chemical structures). Since Masashi teaches the same polymer particles claimed in the instant application, absent a showing to the contrary, it is the position of the examiner that the particles would have the same functional limitations of claims 3-4 and 12-13.

While Masahi fails to exemplify a cosmetic emulsion and hence an antiperspirant composition and method claimed, Masahi teaches the particles may be admixed with fillers or additives including organic powders, natural polysaccharides, inorganic powders, including alumina, antioxidants, antiseptic agents, disinfectants, surface active agents, coloring agents, perfumes and deodorants (page 21, top paragraph).

5. Modi teaches personal care compositions comprising hydrophobically modified water soluble polysaccharide polymer and a personal care agent, wherein the personal care agents can be in the form of oil-in-water or water-in-oil emulsions (abstract and claim 1). Modi teaches that the composition can be used for a wide range of personal care products such as shampoo, antiperspirant products, sunscreen products etc (col. 4, L 31-68). Modi describes preparation of emulsions in col. 8-9. Modi teaches that the hydrophobically modified polymers impart stability to the composition.

It would have been obvious for a skilled artisan at the time of the instant invention was made to use the water absorbing polymers particles of the '050 patented claims for preparing cosmetic compositions because Masahi teaches surface treated water absorbing polymers can be mixed with organic powders and other cosmetic additives in cosmetic emulsion formulations and have an improved hygroscopic blocking rate in a high humidity and obtain a wettability to prevent the generation of dust. Masahi suggests that the water absorbing polymers that are surface-hydrophobated further improve the water absorption rate that is not seen in the conventional water-absorbent particles. Further, it would have been obvious for one skilled in the art to prepare the cosmetic compositions comprising water absorbing polymers of '050 claims in the form of oil-in-water or water-in-oil emulsions because Modi teaches that one can prepare cosmetic compositions comprising hydrophobically modified water soluble polysaccharides in the form of oil-in-water or water-in-oil emulsions thus suggesting the suitability of the hydrophobically modified polymers for both oil-in-water and water-in-oil compositions.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 1, 3-10 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masashi et al. (AU-B-25757/95, cited in the previous actions) and US 7732050 to Nambu et al (Nambu) OR Masahi over Modi (see above).

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8. **Masashi** discloses water absorbent resin particles comprising water absorbent resin particles (A) which are a cross linked polymer of ethylenically unsaturated monomers comprising acrylic acid and/or acrylic acid salt as an essential element, treated with an organic polysiloxane (B), wherein (A) and (B) are mixed and/or reacted, the particles have a particle size of 10-1000um and the weight ratio of (A)/(B) is 100/(0.001-5) (abstract). Masashi further discloses since the surface of (A) particles is improved with (B) liquid organic polysiloxane, the water absorbent resin particles have an improved hygroscopic blocking rate in a high humidity and obtain a wettability to prevent the generation of dust. Additionally, since the conventional disadvantage of disturbing uniform penetration of water caused by bonding of water-absorbent particles each other is improved by the modification effect of (B) in this invention, the absorption rate is improved. Examples of such water-absorbent resins (A) include cross linked partially neutralized polyacrylic acid, self-cross linked partially neutralized polyacrylic acid, cross linked graft-copolymers of starch-acrylic acid salt, hydrolyzed cross linked graft- polymers of starch-acrylonitrile, cross linked copolymers of vinyl alcohol-acrylic acid salt, hydrolyzed cross linked copolymers of acrylic acid-acrylamide, hydrolyzed cross linked copolymers of acrylic acid salt-acrylonitrile, cross linked copolymers of acrylic acid salt and 2-acrylamide-2-methyl propane sulfonate, neutralized cross linked copolymers of isobutylene-maleic anhydride, and mixture of two or more of these examples (page 7, 2nd paragraph). In the case when the above cross linked polymers shown are examples of water absorbent resins (A) are formed with carboxylic salts such as acrylic salt as a raw material, or when they form salts as a neutralized product or a



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partially neutralized product, examples of such salts include sodium salt, potassium salt, ammonium salt, and amine salt (page 7, last paragraph through page 8, top paragraph). Preferable organic polysiloxane compounds include amino-modified silicone oil such as the amino-modified silicone oil (see page 11 chemical structures). Since Masashi teaches the same polymer particles claimed in the instant application, absent a showing to the contrary, it is the position of the examiner that the particles would have the same functional limitations of claims 3-4 and 12-13.

While Masahi fails to exemplify a cosmetic emulsion and hence an antiperspirant composition and method claimed, Masahi teaches the particles may be admixed with fillers or additives including organic powders, natural polysaccharides, inorganic powders, including alumina, antioxidants, antiseptic agents, disinfectants, surface active agents, coloring agents, perfumes and deodorants (page 21, top paragraph).

9. **Nambu** teaches water absorbing polymer particles suitable for cosmetics wherein silicone can be suitably present in the surface of the polymers. The water absorbing polymers of Nambu are similar to the surface treated polymers of the instant claims. For the claimed amounts, particle sizes and the amount of absorbed water see col. 1, l 45-58 col. 2, l 1-67. For the crosslinking agent, see col. 4, l 50-col. 5. For the functional groups on silicone polymer, see col. 6, l 15+. Nambu teaches that the polymers may be employed in cosmetics for improving the feel of the cosmetics (col. 14, l 58-67 ) and may be in the form of an oil-in water or water-in-oil compositions (col.15, l 1-5 . More specifically, the polymers may be employed in antiperspirants or deodorants (col. 15, l 12-125).

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10. It would have been obvious for a skilled artisan at the time of the instant invention was made to use the water absorbing polymers particles of Masahi in cosmetic emulsion formulations such as oil-in-water or water-in-oil compositions of Nambu particularly, because Nambu suggests that the polymers improve the feel of the cosmetic and Masahi suggests that the water absorbing polymers that are surface-hydrophobated impart improved hygroscopic blocking rate in a high humidity and obtain a wettability to prevent the generation of dust; and further improve the water absorption rate that is not seen in the conventional water-absorbent particles. Further Nambu suggests that the polymers upon absorbing water exhibit a significant reduction in the sticky feeling and gel blocking (phenomenon of forming lumps) attributable to the fusing ability of the surfaces of the polymer particles when used in cosmetics.

11. Alternatively, **Modi** teaches personal care compositions comprising hydrophobically modified water soluble polysaccharide polymer and a personal care agent, wherein the personal care agents can be in the form of oil-in-water or water-in-oil emulsions (abstract and claim 1). Modi teaches that the composition can be used for a wide range of personal care products such as shampoo, antiperspirant products, sunscreen products etc (col. 4, L 31-68). Modi describes preparation of emulsions in col. 8-9. Modi teaches that the hydrophobically modified polymers impart stability to the composition.

It would have been obvious for a skilled artisan at the time of the instant invention was made to use the water absorbing polymers particles of the '050 patented claims for preparing cosmetic compositions because Masahi teaches surface treated water

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absorbing polymers can be mixed with organic powders and other cosmetic additives in cosmetic emulsion formulations and have an improved hygroscopic blocking rate in a high humidity and obtain a wettability to prevent the generation of dust. Masahi suggests that the water absorbing polymers that are surface-hydrophobated further improve the water absorption rate that is not seen in the conventional water-absorbent particles. Further, it would have been obvious for one skilled in the art to prepare the cosmetic compositions comprising water absorbing polymers of '050 claims in the form of oil-in-water or water-in-oil emulsions because Modi teaches that one can prepare cosmetic compositions comprising hydrophobically modified water soluble polysaccharides in the form of oil-in-water or water-in-oil emulsions thus suggesting the suitability of the hydrophobically modified polymers for both oil-in-water and water-in-oil compositions.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1, 3-10 and 12-19 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila G. Landau can be reached on 571-272-0614. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lakshmi S Channavajjala/  
Primary Examiner, Art Unit 1611